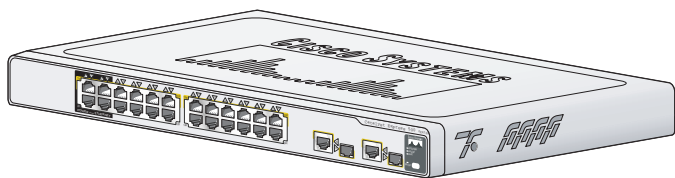




Getting Started Guide



Getting Started Guide for the Catalyst Express 500 Switches INCLUDING LICENSE AND WARRANTY



About this guide

This guide explains how to configure a Catalyst Express 500 switch for the first time. Basic configuration involves assigning network settings and a password to the switch.

After you complete the basic configuration, you can access the internal device manager application to manage and customize the switch. The device manager is an easy-to-use interface that provides tools for configuring, monitoring, and problem solving.

Before you begin

Before you power or install the switch, review the safety information in the *Regulatory Compliance and Safety Information for the Catalyst Express 500 Switch* that accompanies this guide.

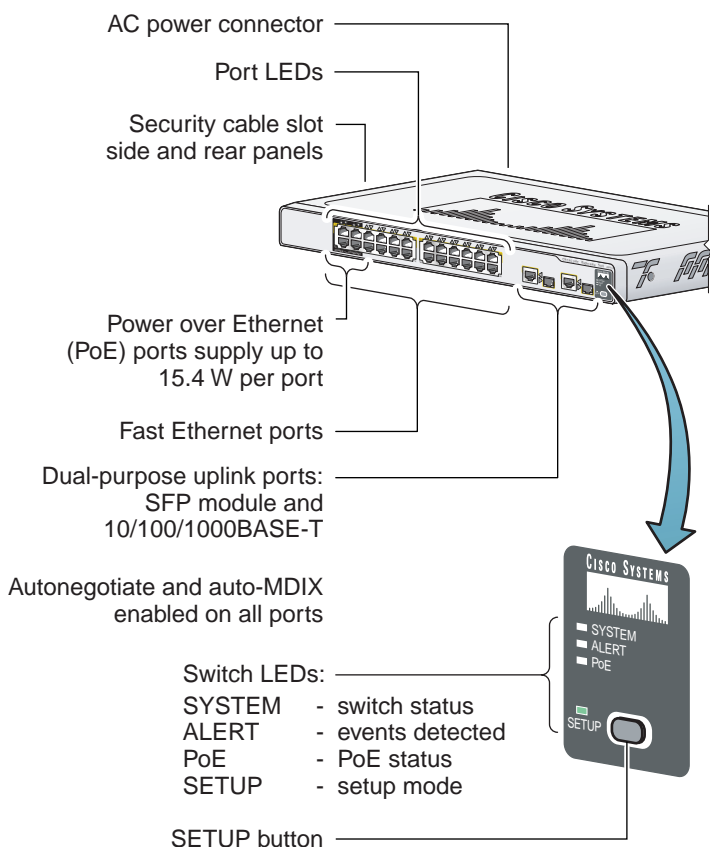
For more information

For complete information about installing and using the switch, see the *User Guide for the Catalyst Express 500 Switches* online at Cisco.com > Technical Support & Documentation > Switches > Catalyst Express 500 Switches.

Quick tour

This illustration shows the Ethernet ports, LEDs, and other features on the switch. To set up the switch, you use the **SETUP** button, an Ethernet port, and the **SYSTEM**, **SETUP**, and port LEDs.

The model shown is a Catalyst Express 500-24LC. Your switch model might look slightly different.



1 Unpack the box

Verify that you have received the items shown here. If any item is missing or damaged, contact your Cisco representative or reseller for instructions.

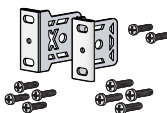
Switch



Power cord



Rack-mounting brackets and screws



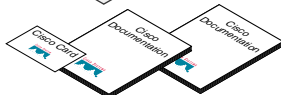
Cable guide and screw



Mounting feet



Documentation

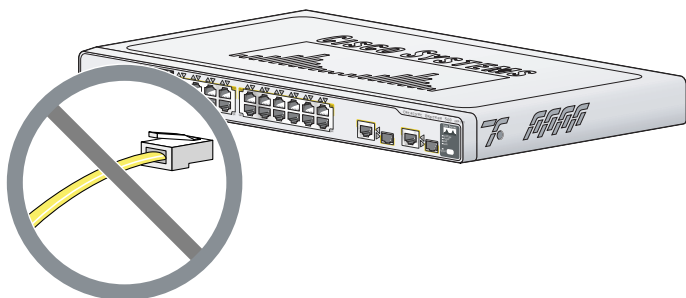


Equipment that you supply to set up the switch:

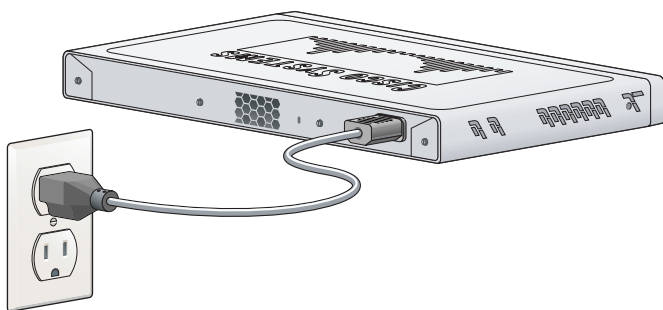
1. A PC with Windows 2000 or XP installed.
2. A web browser (Internet Explorer 5.5, 6.0, Netscape 7.1 or later) with JavaScript enabled.
3. A straight-through or crossover Category 5 Ethernet cable to connect your PC to the switch.

You should disable any pop-up blockers or proxy settings in your browser software and any wireless client running on your PC.

2 Make sure that nothing is connected to the switch



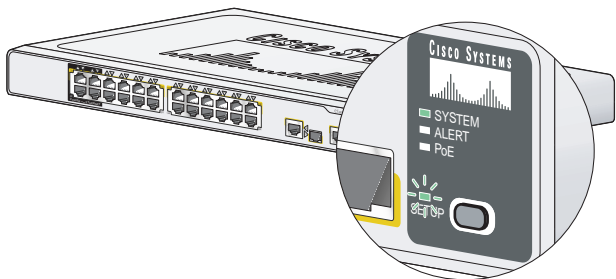
3 Power the switch



Connect the AC power cord to the connector on the switch rear panel. Next, connect the power cord plug to a grounded AC outlet.

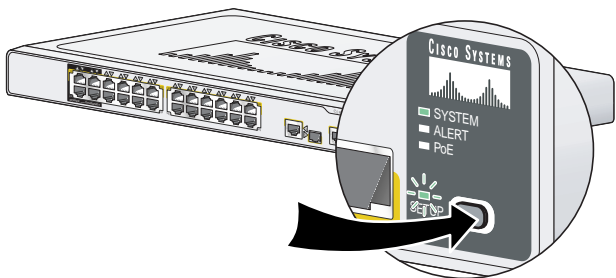
When the switch powers on, it begins the power-on self-test (POST), a series of automatic tests that confirm proper operation. POST lasts approximately 1 minute. During POST, the port and SYSTEM LEDs blink. When POST completes, the SYSTEM LED turns solid green.

4 Wait for the SETUP LED to blink green



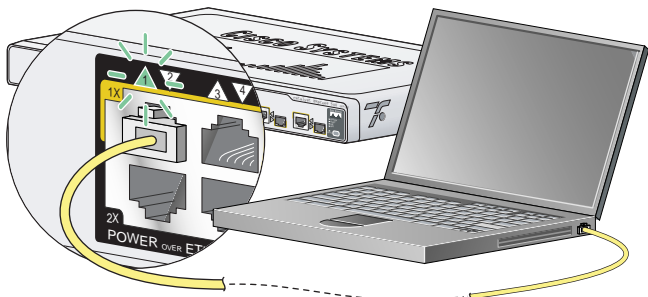
When POST has completed and the SYSTEM LED is solid green, the SETUP LED blinks green. The switch is ready to be configured. (If the SETUP LED stops blinking, you can still continue with the next step.)

5 Press the SETUP button



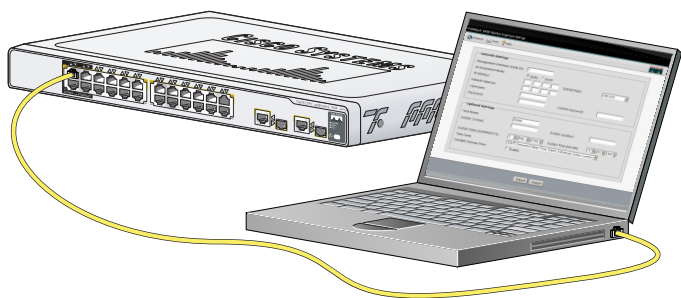
When you press the SETUP button, a switch port LED begins blinking green.

6 When a switch port LED blinks green, connect your PC to that port



Connect one end of the Ethernet cable to the Ethernet port on your PC. Connect the other end to the switch port with the blinking LED. The port LEDs on your PC and the switch blink green while the switch configures the connection.

7 When the SETUP LED turns green, start a browser session on the PC



When you start a browser session on your PC, the set-up window automatically appears. If the window does not appear, check that any proxy settings or pop-up blockers are disabled on your browser and that any wireless client is disabled on your PC. You might also need to enter a URL in your browser, such as *cisco.com*, or another well-known website.

If you need help, see the “Troubleshooting” section on page 17.

8 Enter the network settings

The screenshot shows the 'Catalyst E500 Series Express Setup' window. It has a title bar with 'Refresh', 'Print', and 'Help' icons. The main content is divided into two sections: 'Network Settings' and 'Optional Settings'.
Network Settings:
- Management Interface (VLAN): A text box containing '1'.
- IP Assignment Mode: Radio buttons for 'Static' (selected) and 'DHCP'.
- IP Address: Four text boxes for entering the IP address.
- Default Gateway: Four text boxes for entering the default gateway.
- Username: A text box.
- Password: A text box.
- Subnet Mask: A drop-down menu showing '255.255.255.0'.
- Confirm Password: A text box.
Optional Settings:
- Host Name: A text box containing 'Switch'.
- System Date (DD/MM/YY): A date picker showing '29 Jun 2005'.
- System Time (HH:MM): A time picker showing '02:52 PM'.
- Time Zone: A drop-down menu showing '(GMT+05:30) Bombay, Calcutta, Madras, New Delhi'.
- Daylight Saving Time: A checkbox labeled 'Enable' which is currently unchecked.
At the bottom of the window are 'Submit' and 'Cancel' buttons.

Network Settings	Description
Management Interface (VLAN)	We recommend using the default, VLAN 1. The management VLAN establishes an IP connection to the switch.
IP Assignment Mode	We recommend using the default, Static, which means that the switch always has the IP address that you assign. Use the DHCP setting when you want the switch to automatically obtain an IP address from a DHCP server.
IP Address	Enter the IP address for the switch. (Later, you can use the IP address to access the switch through the device manager.)
Subnet Mask	Select a mask from the drop-down list.
Default Gateway	Enter the IP address of the router.
Username	Enter a unique name.

Network Settings	Description
Password	Enter a password. The password can be from 1 to 25 alphanumeric characters, can start with a number, is case sensitive, allows embedded spaces, but does not allow spaces at the beginning or end. In the Confirm Password field, enter your password again.
Optional Settings	Enter a Host Name for the switch. The date and time fields are populated from your PC.

9 Click Submit to save changes and finish basic configuration

When you click Submit, the information you entered is saved. You have completed the initial switch setup. If you click Cancel, the fields are cleared, and you can start over.

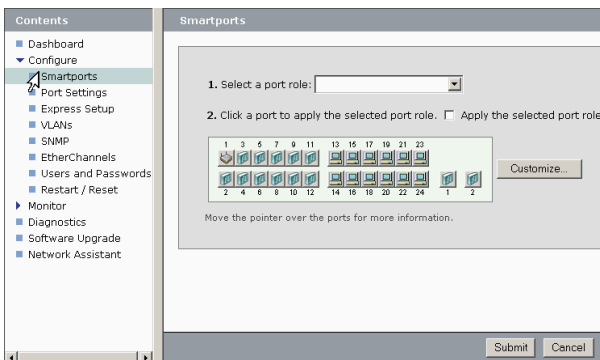
10 Apply Smartports roles

Immediately after you click Submit in Step 9, the Smartports dialog window appears.

Click Yes and Submit to accept the predefined port roles. The Smartports window appears. Here you can change the predefined roles or apply new port roles as described below.

Click No and Submit to apply the Smartports roles yourself. When the device manager window appears, locate the Contents menu on the left side of the window. Click Configure and then Smartports. Follow these steps:

1. Select a port role from the pull-down menu.
2. Click a port to apply the selected port role.
3. Click Submit to save the Smartports roles.



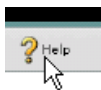
We recommend that you apply the Cisco Smartports roles now. The ports are then correctly configured before they are connected to devices. Smartports roles provide optimal performance on port connections, including appropriate levels of reliability, security, and availability. They also help prevent many problems caused by port misconfigurations.

The only requirements are to decide and write down which switch port will be connected to which device type.

You can connect a WAN device to any port. Apply the Router port role for this type of connection. Use an uplink port to connect to another switch and apply the Switch port role.

Smartports Roles	Description
Desktop	Apply this role on switch ports connecting to desktop devices, such as desktop PCs, workstations, notebook PCs, and other client-based hosts. Note: Do not apply the Desktop role on ports that are connected to routers or to other switches.
IP Phone+ Desktop	Apply this role on switch ports connecting to IP phones. A desktop device, such as a PC, can be connected to the IP phone. Both the IP phone and connected PC would have access to the network and the Internet.

Smartports Roles	Description
Access Point	Apply this role on switch ports connecting to wireless access points (APs). Connected to the AP are mobile devices, such as wireless laptop PCs.
Printer	Apply this role on switch ports connecting to a printer, such as a network printer or an external print server.
Guest	Apply this role on switch ports that are used by guests and visitors. Guests have access to the Internet but not access to your internal network. You can connect an AP on this port to provide guest wireless access.
Server	Apply this role on switch ports connecting to servers that provide network services, such as exchange servers, collaborative servers, terminal servers, file servers, and DHCP servers.
Switch	Apply this role on switch ports connecting to other switches.
Router	Apply this role on switch ports connecting to WAN devices that connect to the Internet, such as routers, firewalls, or virtual private network concentrators.
Other	Apply this role on switch ports if you do not want to assign a specialized role on the port.



If you need more information, click Help on the device manager toolbar.

When you are finished, disconnect your PC from the switch to end the session.

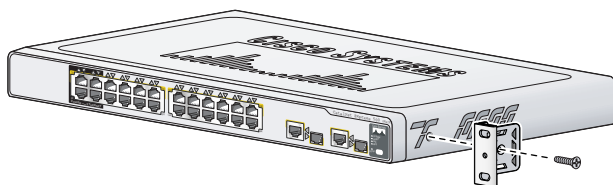
11 Install the switch

Before you install the switch, review the Regulatory Compliance and Safety Information document that came with your switch. For more information about installation, see the *User Guide for the Catalyst Express 500 Switches* online at Cisco.com.

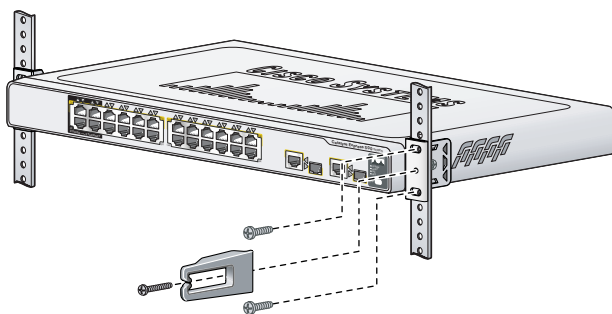
When selecting an installation site, observe these guidelines:

- Cabling is away from sources of electrical noise, such as radios, power lines, and fluorescent lighting fixtures.
- Clearance to the switch front and rear panels is such that
 - Airflow around the switch and through the vents is unrestricted.
 - Front-panel LEDs can be easily read.
 - Access to ports is sufficient for unrestricted cabling.
 - AC power cord can reach from the AC power outlet to the connector on the switch rear panel. The power outlet must be accessible at all time because it serves as the main method to disconnect power from the switch.
- Temperature does not exceed 113°F (45°C), humidity does not exceed 85 percent, and altitude at the installation site is not greater than 10,000 feet (3049 m).

Rack-mounting

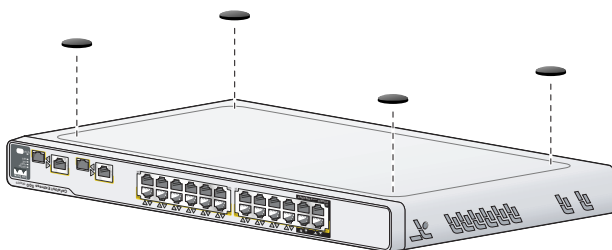


Position the mounting bracket and screw on the side of the switch. Tighten the screw with a screwdriver. Repeat on the opposite side.



Insert the switch into the 19-inch rack and align the bracket in the rack. Use either the 10-32 pan-head screws, or the 12-24 pan-slotted screws to secure the switch in the rack. Use the black Phillips screw to attach the cable guide to either bracket.

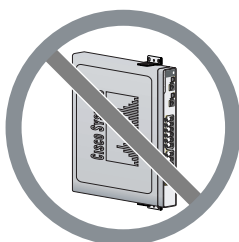
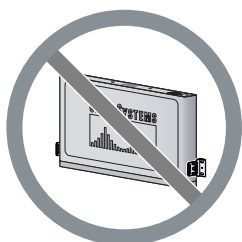
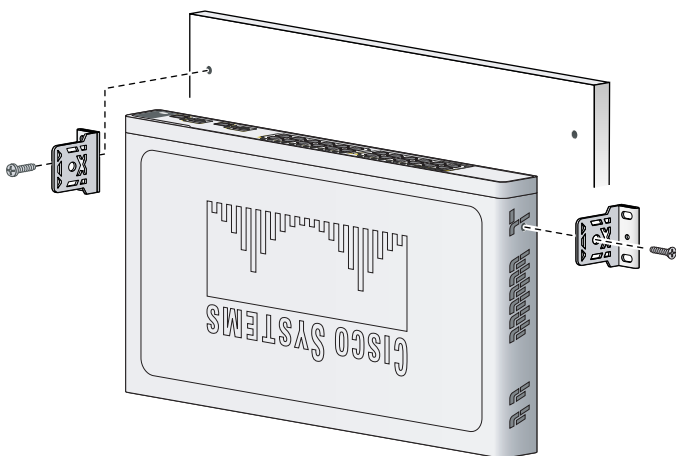
Desktop-mounting



Place the switch upside-down on a flat surface. Attach the four rubber pads to the recessed areas on the bottom of the switch. Place the switch on a desktop near an AC power source.

If you are stacking switches, make sure that the mounting feet of the upper switch align with the recesses of the lower switch. Do not stack more than four units high.

Wall-mounting

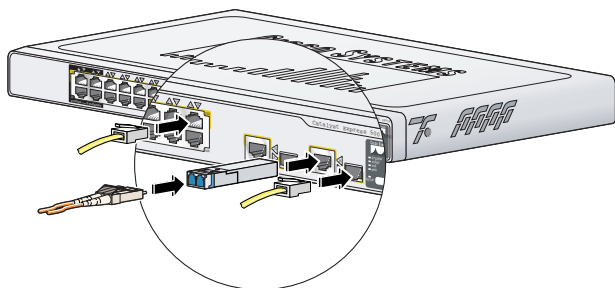


Position the mounting bracket and screw on the side of the switch, rotated 90-degrees from the view shown in the rack-mounting illustration. Tighten the screw with a screwdriver. Repeat on the opposite side.

Mount the switch on the wall with the front panel facing up. For the best support of the switch and cables, make sure that the switch is attached securely to wall studs or to a firmly attached plywood mounting backboard. Screws for wall-mounting are not provided.

If your switch has a redundant power supply (RPS) connector on the rear panel, make sure that the cover plate is installed if an RPS is not connected to the switch.

12 Connect devices



When you connect devices to the switch ports, refer to the Smartports role assignments that you recorded in Step 10.

Ethernet connections

- Use either straight-through or crossover Category 5 cables with RJ-45 connectors to connect from the switch Ethernet ports to other devices.
- By default, the PoE ports automatically provide up to 15.4 W power when IEEE 802.3af-compliant-powered devices are connected.
- By default, autonegotiation and auto-MDIX are enabled on the 10/100BASE-T and 10/100/1000BASE-T ports; the ports automatically provide the appropriate Ethernet connection.

Uplink port connections

- Use the 10/100/1000BASE-T port or add a Cisco fiber-optic SFP module to the SFP module port for a Gigabit uplink connection to another switch. Use Category 5 cables with RJ-45 connectors to connect to a 10/100/1000BASE-T port. Use LC fiber connectors to connect to a fiber-optic SFP module.

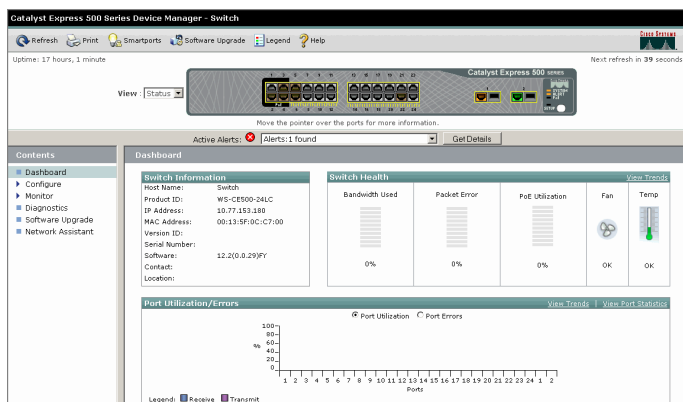
- The dual-purpose uplink ports establish a link through either the SFP module port or the 10/100/1000BASE-T port, but not both at the same time. An SFP module port has precedence over a 10/100/1000BASE-T port. If an SFP module port has a link, that link is active. If the SFP port does not have a link and the 10/100/1000BASE-T port does, that link is active. Reselection occurs when the active link is disconnected.

For a list of supported modules, see the *Catalyst Express 500 Switch Release Notes* on Cisco.com. For detailed instructions on installing, removing, and connecting to SFP modules, see the documentation that accompanied the module.

13 More information

This section includes information about the device manager, troubleshooting, and the Cisco warranty terms.

How to access the device manager



The simplest way to configure, manage, and monitor the switch is by using the device manager. You can access the device manager from anywhere in your network through a web browser. Follow these steps:

1. Set up and install the switch in your network, and connect devices as described in this guide.
2. Launch a web browser on your PC.
3. Enter the switch IP address (the address that you assigned in Step 8) in the web browser, and press Enter. The device manager page appears.
4. To end the session, close your browser window.

About Cisco Network Assistant

Cisco Network Assistant is a free software program that you download from Cisco.com and run on your PC. Network Assistant offers advanced options for configuring and monitoring multiple devices. Click Network Assistant on the device manager menu for more information.

Troubleshooting

Help with the initial switch configuration is provided below. For additional assistance, refer to the online documentation at Cisco.com > Technical Support & Documentation > Switches > Catalyst Express 500 Switches.

Checklist	Recommendation
Was the SETUP LED blinking when you pressed the SETUP button?	If no, or you are not sure, restart the switch. Make sure that the SETUP LED is blinking when you press the SETUP button.
Did you connect your PC to the wrong switch port?	Verify that you are connected to the switch port with the blinking LED as shown in Step 6.

Checklist	Recommendation
Did you start a browser session on your PC before the SETUP LED was solid green?	If yes, or you are not sure, restart the switch. Perform Step 2 through Step 6. When the SETUP LED is solid green, start a browser session on your PC. Complete the set-up procedure.
Did you start a browser session on your PC and the set-up page did not appear?	If the window does not appear, enter a URL in your browser, such as <i>cisco.com</i> , or another well-known website.
Did you have a pop-up blocker running on your PC when you connected to the switch port?	If yes, disconnect the cable from the switch port, disable the pop-up blocker, and reconnect to the switch. Press the SETUP button to continue.
Did you have proxy settings enabled in your browser software when you connected to the switch port?	If yes, disconnect the cable from the switch port, disable the proxy settings, and reconnect to the switch. Press the SETUP button to continue.
Did you have a wireless client running on your PC when you connected to the switch port?	If yes, disconnect the cable from the switch port, disable the wireless client, and reconnect to the switch. Press the SETUP button to continue.
Do you need to change the switch IP address after you have already completed the initial setup?	Go to the Configure > Express Setup device manager screen to change the switch IP address. For more information about changing the switch IP address, see the <i>User Guide for the Catalyst Express 500 Switches</i> online at Cisco.com.

Cisco Limited Lifetime Hardware Warranty Terms

There are special terms applicable to your hardware warranty and various services that you can use during the warranty period. Your formal Warranty Statement, including the warranties and license agreements applicable to Cisco software, is available on Cisco.com. Follow these steps to access and download the *Cisco Information Packet* and your warranty and license agreements from Cisco.com.

1. Launch your browser, and go to this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpkc/cetrans.htm

The Warranties and License Agreements page appears.

2. To read the *Cisco Information Packet*, follow these steps:
 - a. Click the Information Packet Number field, and make sure that the part number 78-5235-03A0 is highlighted.
 - b. Select the language in which you would like to read the document.
 - c. Click Go.
 - d. The Cisco Limited Warranty and Software License page from the Information Packet appears.
 - e. Read the document online, or click the PDF icon to download and print the document in Adobe Portable Document Format (PDF).



Note

You must have Adobe Acrobat Reader to view and print PDF files. You can download the reader from Adobe's website:

<http://www.adobe.com>

3. To read translated and localized warranty information about your product, follow these steps:
 - a. Enter this part number in the Warranty Document Number field:
78-6310-02C0
 - b. Select the language in which you would like to view the document.
 - c. Click Go.
The Cisco warranty page appears.
 - d. Read the document online, or click the PDF icon to download and print the document in Adobe Portable Document Format (PDF).

You can also contact the Cisco service and support website for assistance:

http://www.cisco.com/public/Support_root.shtml.

Duration of Hardware Warranty

A Cisco product hardware warranty is supported for as long as the original end user continues to own or use the product, provided that the fan and power supply warranty is limited to five (5) years. In the event of a discontinuance of product manufacture, the Cisco warranty support is limited to five (5) years from the announcement of the discontinuance.

Replacement, Repair, or Refund Policy for Hardware

Cisco or its service center will use commercially reasonable efforts to ship a replacement part within ten (10) working days after receipt of the Return Materials Authorization (RMA) request. Actual delivery times can vary, depending on the customer location.

Cisco reserves the right to refund the purchase price as its exclusive warranty remedy.

To Receive a Return Materials Authorization (RMA) Number

Contact the company from whom you purchased the product. If you purchased the product directly from Cisco, contact your Cisco Sales and Service Representative.

Complete the information below, and keep it for reference.

Company product purchased from	
Company telephone number	
Product model number	
Product serial number	
Maintenance contract number	

CISCO SYSTEMS



Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7860
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries. Addresses, phone numbers, and fax numbers are listed on the

Cisco Website at www.cisco.com/go/offices

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica
Croatia • Cyprus • Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece
Hong Kong SAR • Hungary • India • Indonesia • Ireland • Israel • Italy • Japan • Korea • Luxembourg
Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal • Puerto
Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden
Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

CCSP, CCVP, the Cisco Square Bridge logo, Follow Me Browsing, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networks logo, Networking Academy, Network Registrar, Packet, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0601R)

© 2005 Cisco Systems, Inc. All rights reserved.

Printed in China PRC

78-17084-02
DOC-7817084=